

DOCKET SECTION

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

RECEIVED

Oct 1 5 03 PM '97

POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE
WITNESS DEGEN TO INTERROGATORIES OF
MAGAZINE PUBLISHERS OF AMERICA, ABA etc.,
DOW JONES, AND NATIONAL FEDERATION OF NONPROFITS
(MPA/USPS-T12-11-16, ABAetc/USPS-T12-1-4,
DJ/USPS-T12-1, NFN/USPS-T12-1-2)

The United States Postal Service hereby provides responses of witness Degen to the above interrogatories, filed on September 17, 1997.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking



Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2992; Fax -5402
October 1, 1997

**Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America**

MPA/USPS-T12-11. Please refer to Attachment 1 of your response to MPA/USPS-T12-1.

- a. Has the Postal Service performed any quantitative studies to determine whether uncounted items are similar to counted items (with respect to Class, Subclass, and shape)? If so, please summarize the findings of each study and provide a copy.**
- b. Has the Postal Service performed any quantitative studies to determine whether unidentified containers are similar to identified and identical containers (with respect to the items contained within the container)? If so, please summarize the findings of each study and provide a copy.**
- c. Has the Postal Service performed any quantitative studies to determine whether items in containers are similar to items not in containers (with respect to Class, Subclass, and shape)? Of so, please summarize the findings of each study and provide a copy of each study.**

MPA/USPS-T12-11 Response.

- a. I am aware of no such studies.**
- b. I am aware of no such studies.**
- c. I am aware of no such studies.**

**Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America**

MPA/USPS-T12-12. Please refer to your response to OCA/USPS-T12-19 and suppose that data collectors were instructed to always enter multiples of 25 for the nonzero responses to question 21D.

- (a) Would such a practice constitute a potential source of nonsampling error? Please explain fully.
- (b) Could such a practice bias the responses of data collectors upward or downward? Please explain fully.

MPA/USPS-T12-12 Response.

- a. This scenario does not materially differ from that of OCA/USPS-T12-19 part e, so my response to OCA applies here as well.
- b. Assuming that data collectors rounded the percentages appropriately, there is no reason why such a practice would constitute a source of bias.

Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America

MPA/USPS-T12-13. Please refer to your response to MPA/USPS-T12-2(i)(ii) where you state: "The costs for passport-related activities should fall into the non-volume variable portion of the cost pool and, thus, not be distributed to subclass."

- a. Please confirm that Witness Bradley's regression analysis does not definitively show that passport-related activities fall into the non-volume variable portion of the cost pool and, thus not be distributed to subclass."
- b. Please confirm that Witness Bradley's regression analysis does not definitively show whether the cost for any IOCS activity code falls into the non-volume variable portion of cost. If not confirmed, please explain fully.
- c. Please confirm that if the hours for passport-related activities vary with the number of direct work hours within a cost pool, the cost for passport-related activities would indirectly vary with total piece handlings for the cost pool. If not confirmed, please explain fully.

MPA/USPS-T12-13 Response.

- a.-b. Confirmed. This is why the mail processing cost distribution methodology does not arbitrarily throw out tallies with activity codes which might be assumed to correspond to non-volume-variable costs.
- c. Confirmed. Of course, for actual mail processing overhead activities, I would expect there to be a causal relationship between the overhead workhours in a cost pool and the cost driver.

Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America

MPA/USPS-T12-14. Please refer to Page 5, Lines 12-14 and Footnote 7 and Table 5 of your direct testimony.

- a. Please confirm that the only cost pools for which you did not confine the distribution of mixed mail tallies to direct tallies associated with the same cost pool were platform activity cost pools ("MODS 1Platform" and "BMCs Platform").
- b. Individually for all cost pools where you did not confine the distribution of mixed mail tallies to direct tallies associated with the same cost pool, please list the cost pools on which you distributed mixed mail tallies.
- c. For which cost pools did you not confine the distribution of not handling mail tallies to direct and mixed mail tallies within the same cost pool?
- d. Individually for all cost pools where you did not confine the distribution of not handling mail tallies to direct and mixed mail tallies associated with the same cost pool, please list the cost pools on which you distributed not handling mail tallies.

MPA/USPS-T12-14 Response.

- a. *Confirmed that the distribution of mixed-mail tallies in the MODS 1Platform and BMC Platform pools are not confined to the same cost pool. Mixed-mail tallies with basic function "other" are distributed using tallies in all basic functions (please see LR-H-146 at II-14). For other cost pools, the MOD2ITEM, MOD3CONT, BMC2, BMC3, NONMOD12, and NONMOD3 programs attempt a distribution confined within cost pool, but distribute the mixed-mail tallies over all distributing tallies for the office group for the given item or container type if there are no distributing tallies within the cost pool.*
- b. For the MODS Platform pool, please see the source code to program MOD22ITM, lines 21-24, LR-H-146. For other pools, the distribution is

**Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America**

over all cost pools in the office group (all basic functions in the case of the non-MODS office group).

- c. The MODS cost pools for which the not-handling-mail tally distribution is not confined to the same cost pool are listed in LR-H-146, at II-11 to II-12. There are no BMC cost pools where this applies. Treatment of not-handling-mail tallies for non-MODS offices is somewhat different from the other office groups; see LR-H-146 at II-15. Please also see the source code to programs MOD4DIST, BMC4, and NONMOD4, LR-H-146.
- d. Please see LR-H-146 at II-11 to II-12 and II-15.

**Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America**

MPA/USPS-T12-15. Please confirm that you distributed the attached briefing materials at your August 20, 1997 Technical Conference.

MPA/USPS-T12-15 Response.

Confirmed.

**Response of United States Postal Service Witness Degen
to Interrogatories of Magazine Publishers of America**

MPA/USPS-T12-16. Please refer to pages 16 and 17 of the briefing materials which you distributed at the August 20, 1997 Technical Conference, where you state: "If no direct tallies are found for an item type within a cost pool then mixed-mail items are distributed using direct items of the same type for all cost pools. Loose mail in containers is treated as an item....If no direct or identified containers are found in the cost pool, the distribution for the container type across all cost pools is used."

- a. Please list all cost pool/item type combinations with no direct tallies, and provide the number of unweighted mixed mail tally counts and the weighted mixed mail tally cost for each cost pool/item type combination with no direct tallies. Please provide this information in an electronic spreadsheet.
- b. When you stated, "If no direct tallies are found for an item type within a cost pool then mixed-mail items are distributed using direct items of the same type for all cost pools," did you mean that mixed-mail items are distributed using direct items of the same type for all cost pools within a facility type (e.g., non-MODS, BMCs, MODS)?
- c. Please list all cost pool/container type combinations with no direct or identified container tallies, and provide the number of unweighted unidentified container tally counts and the weighted container tally cost for each cost pool/container type combination with no direct or identified container tallies. Please provide this information in an electronic spreadsheet.

MPA/USPS-T12-16.

- a. Please see spreadsheet MPA-16a.xls, which will be filed in LR-H-287, for the requested data.
- b. Yes.
- c. Please see spreadsheet MPA-16c.xls, which will be filed in LR-H-287, for the requested data.

**Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers**

ABA&EEI&NAPM/USPS-T12-1. What percentages, by cost pool, of your total cost estimates are driven by:

- a. "pool-specific workload measure(s)", page 8, line 9.
- b. "allied operation workload", page 8, lines 13-14.
- c. "variabilities for related cost pools", page 8, line 16?

ABA&EEI&NAPM/USPS-T12-1 Response.

a.-c. Please note that the variability for each cost pool is determined by one of the above three means. Thus, for each cost pool, the percentage will be 100% for one of a.-c. and 0% for the other two. Attachment 1 to this response shows the requested breakdown.

Attachment 1, Response to ABA&EEI&NAPM/USPS-T12-1

Cost Pool	Short Name	a. Direct (pool- specific)	Category	
			b. Allied	c. Other
Automated Equipment				
BCS, BCS on OCR	bcs	100%		
OCR	ocr	100%		
Mechanized, Letters & Flats				
SPFSM, FSM & FSM/BCR	fsm	100%		
LSM, MPLSM & SPLSM W/BCR	lsm	100%		
Mechanized, Other				
Mechanical Sort - Sack Outside	1SackS_m			100%
Mechanized Parcels	mecparc			100%
SPBS - Non Priority	SPBS Oth	100%		
SPBS - Priority	SPBS Prio	100%		
Manual Operations				
Manual Flats	manf	100%		
Manual Letters	manl	100%		
Manual Parcels	manp	100%		
Manual Priority	Priority	100%		
LDC 15 - RBCS	LD15	100%		
Allied Operations				
Air Contract DCS and Incoming	1Scan			100%
Bulk Presort	1Bulk pr			100%
Cancellation & Mail Preparation - metered	1CancMPP	100%		
Manual Sort - Sack Outside	1SackS_h			100%
Opening Unit - Preferred Mail	1OpPref		100%	
Opening Unit - BBM	1OpBulk		100%	
Platform	1Platform		100%	
Pouching Operations	1Pouching		100%	
Other Operations				
Business Reply / Postage Due	BusReply			100%
Damaged Parcel Rewrap	Rewrap			100%
Empty Equipment	1EEqmt			100%
Express Mail	Express			100%
Mailgram	Mailgram			100%
Mail Processing Support	1Support			100%
Miscellaneous Activity	1Misc			100%
Registry	Registry	100%		
International	Intl			100%
LDC 41 - Unit Distribution - Automated	LD41			100%
LDC 42 - Unit Distribution - Mechanized	LD42			100%
LDC 43 - Unit Distribution - Manual	LD43			100%
LDC 44 - Post-Office Box Distribution	LD44			100%
LDC 48 - Customer Service / Express	LD48 Exp			100%
LDC 48 - Customer Service / Admin	LD48 Adm			100%
LDC 48 - Customer Service / Spec Servc.	LD48 SpS			100%
LDC 48 - Customer Service / Other	LD48 Oth			100%
LDC 49 - Computerized Forwarding Syst.	LD49			100%
LDC 79 - Mailing Req' & Bus. Mail Entry	LD79			100%
MODS 1 & 2 Subtotal				
Platform	Platform		100%	
Allied Labor & all other Mail Processing	Allied		100%	
Parcel Sorting Machine	PSM	100%		
Sack Sorting Machine	SSM	100%		
SPBS & Irregular Parcels (IPP & 115)	SPB	100%		
Non-Machinable Outside (NMO)	NMO	100%		
BMCs Subtotal				
All Other Operations (i.e., non-MODS)	Non-MODS			100%

Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers

ABA&EEI&NAPM/USPS-T12-2. How do the percentages in (1), above, for direct (a) and indirect (b and c) cost measurement compare to the older system of I.O.C.S. tallies, insofar as direct and indirect cost measurement is concerned?

ABA&EEI&NAPM/USPS-T12-2 Response.

There is no comparison between the old and new systems in this regard.

The mail processing cost pools are a composite of costs that would be classified under the mail processing direct labor, mail processing fixed, and mail processing overhead sub-components in the FY 1996 CRA. (Please see USPS-T-12, page 10, line 13.) Thus, your categorization of 1(a) as "direct" and 1(b)-1(c) as "indirect" is not accurate. Cost pools categorized per 1(a) are mostly "direct" distribution operations in common parlance, and "allied operation" cost pools are sometimes referred to as "indirect" operations. However, both "direct" and "indirect" operations consist of "direct labor" and "overhead" according to the technical meaning of the latter two terms in the CRA methodology. See LR-H-1, section 3.1. The cost pools categorized per 1(c) are not exclusively "indirect" operations. See witness Bradley's testimony, USPS-T-14, for discussion of the process of determining variabilities for the cost pools with and without workload measures.

Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers

ABA&EEI&NAPM/USPS-T12-3. Under the new mixed mail methodology:

- a. what percentage of mixed mail containers is examined?
- b. exactly how does examination of "shapes of loose mail and/or items" (page 9, line 16) help distribute mixed mail volumes across classes and subclasses?

ABA&EEI&NAPM/USPS-T12-3 Response.

- a. I assume that you mean the percentage of mixed-mail containers that have "identified" contents in the sense of USPS-T-12, page 9, line 16. From my response to TW/USPS-T12-9 and LR-H-219, of the \$1,187.858 million in volume-variable costs associated with mixed-mail containers, 52.4% is identified, 41.8% represents empty equipment handling, and 5.8% is other "not identified" container costs.
- b. Please note that the mixed-mail distribution does not distribute volumes as such, but rather costs associated with mixed-mail tallies, as part of the distribution key formation process. Examination of identified container contents is useful in identifying appropriate distribution keys for mixed-mail containers because there are strong shape and/or subclass associations with the loose mail shapes and item types. For instance, the portion of costs associated with a container's loose letters content would only be distributed to activity codes for letter-shape mail categories. For additional discussion, please see USPS-T-12 at 10, and

**Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers**

my responses to UPS/USPS-T5-2, MPA/USPS-T12-1, and TW/USPS-T12-
29 part e.

Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers

ABA&EEI&NAPM/USPS-T12-4.

- a. Is the column "Est. Cost" from your Table 1 from the 1996 CRA, 1996 base year costs as formulated in Alexandrovich (USPS-T5), or other source?
- b. If your answer to 4 a, above, is Alexandrovich, please reconcile your Table 1 figure of \$3,111,318,000 for city carriers, in office direct labor, with the base year 1996 cost segment 6, column 6.1 total of \$3,111,448,000 in witness Alexandrovich's testimony (Exhibit USPS-5A, P. 26).
- c. If your answer to 4 a, above, is other than Alexandrovich, please provide the estimated costs in Table 1-Table 6 by his Base Year 1996 numbers.

ABA&EEI&NAPM/USPS-T12-4 Response.

- a. As the title to Table 1 from USPS-T-12 indicates, the "Est. Cost" column is "Estimated IOCS costs" for the combinations of craft and activity.

That is, the costs are the sums of IOCS tally dollar values for tallies with selected roster designations, operation/route codes, and/or activity codes. The costs are estimates in that the number of IOCS tallies for a given craft/activity combination, and therefore the associated tally costs, result from a random sampling process.
- b. Not applicable.
- c. I am not sure what you mean when you say "by his Base Year 1996 numbers." The data in Tables 2, 3, and 6 are reported to indicate the relative standard errors of selected IOCS cost estimates and have no direct relationship to witness Alexandrovich's calculations. The BY 1996 costs corresponding to various categories in Table 1 may be found in

Response of United States Postal Service Witness Degen
to Interrogatories of American Bankers Association and Edison Electric
Institute and National Association of Presort Mailers

USPS-T-5, Exhibit USPS-5A, cost segments 2 (supervisors and technicians), 3 (clerks and mailhandlers), 6 and 7 (city delivery carriers), and 9 (special delivery messengers). Table 5 is an input to witness Alexandrovich's calculations for cost segment 3.1, and Table 4 is an input to Table 5.

**Response of United States Postal Service Witness Degen
to Interrogatories of Dow Jones & Company, Inc.**

DJ/USPS-T12-1.

Referring to TW/USPS-T12-34, please also provide copies in the form of a library reference all other papers or studies which your firm, Christensen Associates, has produced, or has been involved in producing, relating to the productivity of the United States Postal Service.

DJ/USPS-T12-1 Response.

Other papers and studies by Christensen Associates regarding U. S. Postal Service productivity are being filed as LR-H-282. These are all the relevant studies I could locate in our files.

Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits

NFN/USPS T-12-1

- a. Please confirm that in USPS T-12, Table 4 under the "FUNCTION 4" (sic) and in II. 31-39 in (sic) certain Labor Distribution Codes are described as follows:
 - LDC 41 Unit Distribution-Automated
 - LDC 42 Unit Distribution Mechanized
 - LDC 43 Unit Distribution-Manual
 - LDC 48 Customer Service/Others
- b. Please confirm that in LR H-147, Exhibit 513.1, p.3 (M 32, TL-9, 12 -1-87), LDC's listed in the 40's are as follows:
 - LDC 42 Window service
 - LDC 43 Distribution
 - LDC 48 Administrative/Miscellaneous
- c. Please reconcile the two uses of Labor Distribution Codes in a. and b. above.
- d. Is it the fact that LRH-147 is outdated? If so, please mention every other way Library Reference H-147 is out of date.

NFN/USPS-T12-1 Response.

- a. Confirmed.
- b. Confirmed.
- c. LDCs 41 and 42 have been redefined. Window services are now LDC 45 (see LR-H-146 at I-35). LDCs 43 and 48 have been retitled.
- d. LR-H-147 has not been updated since the above changes were made to the LDC definitions. Some MODS operation numbers (see LR-H-147, Appendix A) have been redefined to accommodate mail processing equipment deployment and other changes since the last update of LR-H-147. Updated lists of valid MODS operation numbers may be found in

**Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits**

LR-H-146 pages I-12 to I-26, and USPS-T-14, Exhibit 14A. I am not aware of any other ways in which LR-H-147 is out of date.

Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits

NFN/USPS T-12-2

- a. Is the MODS a data collection system intended for inference or a management system intended to be helpful in the management of particular offices?
- b. Is there provision within MODS for different tasks faced by different offices e.g., one office serves a large city while another office is an Area Distribution Center or the gateway to a State?
- c. The two offices in b. above may be sorting mail on the whole to a different level of detail. Do you have any compunctions as a mathematician and economist (USPS-T-12, p.iii, I.3) in relocating \$10.043 billion (USPS-T-12, Table 4, line 46) with the aid of LDC information when it is widely known that workers are frequently clocked in to tasks other than those they are performing because of necessary quick changes to meet exigencies such as dispatches of value. Is it wise to base such a large change on such a slender reed?
- d. (1) Since moving and distributing the mail is an activity in which time is often of the essence and meeting schedules takes procedure over accurate reporting. Is it ever true that two clerks were doing identical activities but at different offices were clocked in to different MODS codes?
(2) Is it not true that MODS grew out the Postal Source Data System which replaced the Workload Recording System which in turn replaced the Workload Measurement System?
(3) Is it not true that a structure was created for collecting pieces of mail and hours worked to be used to manage particular offices but that assurances were given to labor unions that no inter-office comparisons would be made because conditions were often unique in particular offices?
(4) Is it then a violation of principles of least-squares regression analysis (OLS) to consider quantitative numbers measuring comparable quantities when these numbers measured different facts about each other?

NFN/USPS-T-12-2 Response.

- a. As its name suggests, MODS is a management data system intended to be helpful at several levels, including the facility, area, and national levels. MODS was not necessarily intended for "[statistical] inference,"

Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits

but this in no way implies that MODS data cannot be used in applied econometric exercises such as witness Bradley's variability analysis. In USPS-T-14, witness Bradley discusses at length the procedures he employed to put MODS data to its appropriate use.

- b. I believe the intent of the MODS operation numbers is to classify all of the activities that might, in principle, take place in a MODS office. For the most part, the operation definitions are relatively standard across facilities. Different types of facilities would tend to have different mixes of MODS operations in place, though the individual MODS operations would be materially similar.
- c. As I stated in my testimony, I believe the new mail processing costing method produces superior cost estimates (see USPS-T-12 at 5). MODS has been "used by postal management for over 25 years to plan and control activities within postal facilities" (USPS-T-4 at 15), which suggests that it is a solid basis for an operational partition of mail processing costs. I also take exception to your characterization that it is widely known that workers are frequently clocked into operations other than those they are performing. I do not accept this as true at the level of aggregation of the MODS cost pools.

Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits

d.

(1) Yes. For instance, a clerk manually sorting letters to carrier route at a large mail processing plant should be clocked into a MODS operation number associated with the "manl" cost pool, while a clerk manually sorting letters to carrier route at a station or branch which reports workhours to MODS should be clocked into a MODS operation number associated with the "LD43" cost pool.

(2) No. I believe it would be more accurate to say that MODS is a modification of the Workload Reporting System (WLRS). The Postal Source Data System is a data processing network used by MODS. See LR-H-147, exhibit 111.1 and section 120. Both MODS and WLRS are, generically, workload measurement systems. However, I am not familiar with any Postal Service data system specifically called the Workload Measurement System.

(3) I am not aware of any assurances that were given to labor unions regarding the use of MODS data. The fact that each mail processing facility has some unique characteristics does not imply that no MODS data can be aggregated to national quantities. Key MODS data such as workhours and TPH have consistent definitions across sites. Please note also that the uses to which witness Bradley and I have put local and/or aggregated MODS data do not constitute inter-facility

**Response of United States Postal Service Witness Degen
to Interrogatories of National Federation of Nonprofits**

comparisons as I see it. Our effort is geared to the generation of servicewide aggregates (cost pool amounts and variability factors) which by definition abstract from the operational details of specific facilities.

- (4) Your statement of the question is somewhat contradictory: if the data measure "comparable quantities," then the "different facts" are presumably not material to the analysis. Principles of regression analysis are not violated when the data employed are comparable.

I, Carl G. Degen, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.

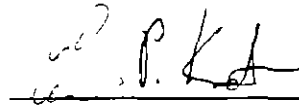


Carl G. Degen

10-1-97
Date

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

A handwritten signature in black ink, appearing to read "Eric P. Koetting", is written over a horizontal line.

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
October 1, 1997